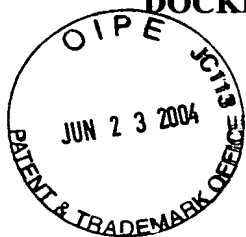


FW

DOCKET NO.: UOPM-0188

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Gary D. Reeder, et al.

Application No.: 10/827,400

Filing Date: April 19, 2004

Confirmation No.: Not Yet Assigned

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

For: MEMBRANE APPARATUS WITH ENHANCED MASS TRANSFER, HEAT TRANSFER AND PUMPING CAPABILITIES VIA ACTION MIXING

DATE OF DEPOSIT:

June 21, 2004

I HEREBY CERTIFY THAT THIS PAPER IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL, POSTAGE PREPAID, ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO THE UNITED STATES PATENT AND TRADEMARK OFFICE, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450.

Elizabeth A. McLoud

TYPED NAME: Elizabeth A. McLoud

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).



In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of

the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

- ☐ In accordance with § 1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, therefore:

☐ Certification in Accordance with § 1.97(e) is attached; or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

- ☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:

☐ Certification in Accordance with § 1.97(e) is attached;

or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

- ☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).

- ☐ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.

- ☒ Copies of references listed on the attached Form PTO-1449 are enclosed herewith
- ☒ Copies of references listed on the attached Form PTO 1449 are not required to be submitted pursuant to the June 30, 2003 recent revisions to 37 CFR § 1.98(a)(2)(i).

EXCEPT THAT:

- ☐ In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.
- ☒ In accordance with § 1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application:
- ☒ Copies of references **1-64 and 80-84** listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. **08/837,048**, filed **April 11, 1997** now **U.S. Patent No. 6,106,776**; copies of references **65-76** listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. **09/157,815**, filed **September 21, 1998** now **U.S. Patent No. 6,217,826**.

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PATENT

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. This form is submitted in duplicate.

- ☒ The relevance of reference number **83** was previously submitted.
- ☐ There are no listed references which are not in the English language.

Date: June 20, 2004



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Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office	Docket No. UOPM-0188	Application No. 10/827,400
	Applicant Gary D. Reeder, et al.	
	Filing Date April 19, 2004	Group Not Yet Assigned
	Confirmation No. Not Yet Assigned	
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
	1	<i>Lawyers' Medical Cyclopedia</i> , "I. The Thorax and Respiratory System", §33.1 - §33.10, NEED DATE , 4-15
	2	"Resonance Energies - Respiration, Respiratory System", 215-226
	3	Extracorporeal Medical Specialties, Inc. (EMSI), Interpulse™ Membrane Oxygenation System, Instructions for Use, 1981 , 1-18 (plus 2 sheets of drawings)
	4	Makarewicz, A.J. et al., "A Dynamic Intravascular Artificial Lung", <i>ASAIO J.</i> , 1994 , M747-M750
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	6	Nose, Y. (ed.) "The Oxygenator", <i>Manual on Artificial Organs</i> , The C.V. Mosby Company, Saint Louis, 1973 , Vol, <i>II</i> , pages 1-2, 4, 6, 10, 12-14, 25-38, 127-162, 175-185
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	8	Thomas, J.A. et al., "A Heart-Lung Machine with Artificial Pulmonary Membrane: First Surgical Results", <i>Arch Mal Coeur</i> , 1958 , <i>51</i> , 801-811 (English translation included)
	9	Levich, "Diffusion Rates in Turbulent Flow", <i>Ch. III</i> , 139-184 and "Heat Transfer in Fluids", <i>Ch. VI</i> , 185-206 in <i>Physiochemical Hydrodynamics</i> , Prentice Hall, Englewood Cliffs, N.J., 1962 (English translation from Russian)
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EXAMINER		DATE CONSIDERED

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	Confirmation No. Not Yet Assigned		
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	11	Sherwood et al., "Rate Equations for Molecular Diffusion", <i>Ch. 3</i> , in <u>Mass Transfer</u> , McGraw Hill, New York. 1975 , 54-100	
	12	Sarns, Inc./3M, brochure entitled "Membrane Oxygenator", 1988 , 2 pages	
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	14	3,291,568	12/13/66	Sautter	23	258.5
	15	3,332,746	07/25/67	Claff et al.	23	258.5
	16	3,352,422	11/1967	Heden	210	321.67
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	18	3,480,401	11/25/69	Holm et al.	23	258.5
	19	3,579,810	05/25/71	Mon	29	527.1
	20	3,674,440	07/04/72	Kitrilakis	23	258.5
	21	3,794,468	02/26/74	Leonard	23	258.5
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	23	3,907,504	09/23/75	Hammond et al.	23	258.5
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	28	4,158,693	06/19/79	Reed et al.	422	46
	29	4,163,721	08/07/79	Lobdell	210	232

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	30	4,165,287	08/21/79	Goyne	210	232
	31	4,179,364	12/18/79	Bratten et al.	210	321 B
	32	4,239,625	12/16/80	Hlavinka	210	321.3
	33	4,312,757	01/1982	Brumfield	210	321.63X
	34	4,402,420	09/06/83	Chernack	220	266
	35	4,424,190	01/03/84	Mather, III et al.	422	46
	36	4,455,230	06/19/84	Elgas et al.	210	232
	37	4,476,685	10/16/84	Aid	62	3
	38	4,487,558	12/11/84	Troutner	417	477
	39	4,490,331	12/25/84	Steg, Jr.	422	46
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	42	4,620,965	11/04/86	Fukusawa et al.	422	46
	43	4,639,353	01/27/87	Takemura et al.	422	46
	44	4,659,549	04/21/87	Hamada et al.	422	48
	45	4,698,207	10/06/87	Bringham et al.	422	46
	46	4,766,768	08/30/88	Norling	73	497
EXAMINER				DATE CONSIDERED		

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	48	4,911,846	03/1990	Akasu et al.	210	645	
	49	5,002,890	03/26/91	Morrison	435	286	
	50	5,011,469	04/30/91	Buckberg et al.	604	4	
	51	5,034,135	07/23/91	Fischel	210	651	
	52	5,037,383	08/06/91	Vaslef et al.	604	26	
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	58	5,311,932	05/1994	Sen et al.	165	109.1	
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	67	4,975,247	12/04/90	Badolato et al.	422	48
	68	5,578,267	11/26/96	Cosentino et al.	422	46
	69	5,817,278	10/06/98	Fini et al.	422	45
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	71	5,316,724	05/31/94	Mathewson et al.	422	48
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	73	5,411,706	05/02/95	Hubbard et al.	422	46
	74	5,626,819	05/06/97	Novello et al.	422	45
	75	5,770,149	06/23/98	Raible	422	46
	76	5,823,987	10/20/98	Elgas et al.	604	4
	77	6,106,776	08/22/00	Borovetz, et al.	422	44
	78	6,217,826	04/17/01	Reeder, et al.	422	45
	79	6,723,284	04/20/04	Reeder, et al.	422	46
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	80	1,437,493	05/26/76	United Kingdom			
	81	WO 94/03266	02/17/94	PCT			
	82	WO 90/10237	09/07/90	PCT			
	83	0 331 557 A1	09/06/89	EP		X	
	84	0 140 315	05/08/85	EP			
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